

ABSTRACT

The addition of low concentrations of combinations of water-soluble organic salts of zinc to gels, creams, lotions or ointments can increase the ability of these products to reduce or prevent exogenous irritants from causing irritation of the underlying substrate. The addition of low concentrations of combinations of water-soluble organic zinc salts to these gels, creams, lotions or ointments also can reduce the irritation of skin or mucous membranes caused by the addition of potentially-irritating substances such as spermicides, microbicides, fungicides or other therapeutic agents to the gel, cream, lotion or ointment. The advantages of this anti-irritant approach over others, which generally employ high concentrations of single zinc salts, are the reduced potential for zinc toxicity, the reduced potential for toxicity related to zinc itself, and the preservation of the desirable biological properties of potentially-irritating therapeutic substances added to the gel, cream, lotion or ointment.